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***Magadanichthys*, a Replacement Name for the Zoarcid Fish Genus *Magadania* (Actinopterygii: Perciformes), with Notes on New Specimens from Russia**

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The genus *Magadanichthys* is established as a replacement name for the zoarcid fish genus *Magadania* Shinohara, Nazarkin and Chereshev, 2004, which is preoccupied by an extinct brachiopod genus, *Magadania* Ganelin, 1977, and an extant lepidopteran genus, *Magadania* Kirpichnikova and Yamanaka, 2001. *Magadanichthys* contains only *Magadanichthys skopetsi* (Shinohara, Nazarkin and Chereshev, 2004). Two new specimens caught in the sublittoral of the Shantar Islands and Sakhalin represent the southernmost records of the species. A description of the new specimens and new biological data are provided.

Key Words: Replacement name, Zoarcidae, *Magadania*, *Magadanichthys*, Sakhalin, Shantar Islands.

Introduction

The monotypic zoarcid fish genus *Magadania* was established by Shinohara *et al.* (2004) for *Magadania skopetsi* Shinohara, Nazarkin and Chereshev, 2004, based on 17 specimens collected from Magadan, a city in the Russian Far East. The generic name is preoccupied by *Magadania* Ganelin, 1977, an extinct brachiopod, and *Magadania* Kirpichnikova and Yamanaka, 2001, an extant lepidopteran. We hereby propose a replacement name for the fish genus as required by the International Code of Zoological Nomenclature. We also report new specimens of the species as range extensions.

Measurements and counts were routinely taken from the left side and were made according to Anderson (1982) except for interorbital width, which was measured as the narrowest distance between the fleshy parts of the corners of the eyes. Standard length (SL) and head length (HL) are used throughout. Measurements were made with calipers to the nearest 0.1 mm. Terminology of head pores follows

Anderson (1994). Specimens are deposited in Laboratory of Marine Zoology, Hokkaido University, Hakodate (HUMZ).

Taxonomic Account

Genus *Magadanichthys* Shinohara, Nazarkin
and Chereshevnev, nom. nov.

Magadania Shinohara, Nazarkin and Chereshevnev in Fedorov *et al.*, 2003: 119 (nom. nud.); Shinohara, Nazarkin and Chereshevnev, 2004: 137 (type species: *Magadania skopetsi* Shinohara, Nazarkin and Chereshevnev, 2004, by original designation), preoccupied by *Magadania* Ganelin in Grigorjewa *et al.*, 1977: 153 (Brachiopoda: Linoproductidae), also preoccupied by *Magadania* Kirpichnikova and Yamanaka, 2001: 2 (Lepidoptera: Pyralidae).

Etymology. The name comprises *Magadan* and *ichthys* (fish in Greek). Gender: masculine.

Diagnosis. Suborbital bones 5; suborbital canal with 6–8 small pores; first epibranchial fan-shaped; palatopterygoid series reduced; supraoccipital broadly contacting exoccipital; posttemporal with weak ventral ramus; upper lip continuous at symphysis; palatine teeth, pelvic fins, and scales present; lateral line incomplete with only a few free neuromasts or, if present, its configuration mediolateral, absent on posterior half of body; vertebrae 18–22+78–83=97–104; and oval, pale spots arranged along ventral half of body.

Remarks. The monotypic genus *Magadanichthys* includes only *Magadanichthys skopetsi* (see below for authorship). On the basis of alcohol-preserved specimens, Shinohara *et al.* (2004) described pale spots arranged on the ventral half of the body along the anal fin base. Because such pale spots are also observable in a fresh specimen (Fig. 1) and have not been reported among other genera with pelvic fins in the Gymnelinae (*Bilabria*, *Davidijordania*, and *Hadropareia*), this character can be added to the diagnosis for *Magadanichthys*.

Magadanichthys skopetsi (Shinohara, Nazarkin
and Chereshevnev, 2004), comb. nov.
(Fig. 1)

Magadania skopetzi [sic] Shinohara, Nazarkin and Chereshevnev in Fedorov *et al.*, 2003: 119 (nom. nud., list).

Magadania skopetsi Shinohara, Nazarkin and Chereshevnev, 2004: 138, figs 1–9 (type locality: Magadan, Russia).

Material examined. HUMZ 140684 (Fig. 1), 1 female, 88.7 mm SL, Lebyazhiya Bay, near Cape Arka, south coast of Feklistova Island, Shantar Islands, Russia (Sea of Okhotsk), 7–9 m depth, 30 July 1995, SCUBA; HUMZ 140714, 1 male, 75.8 mm SL, Severny Bay, northern tip of Sakhalin, Russia (Sea of Okhotsk), 11 August 1995, beam trawl.

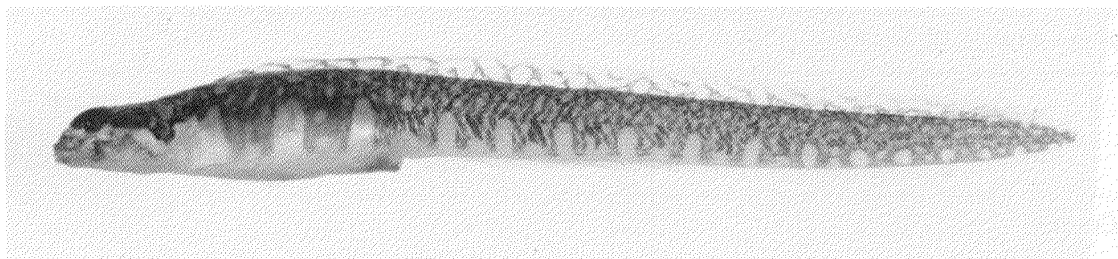


Fig. 1. Fresh specimen of *Magadanichthys skopetsi*, HUMZ 140684, female, 88.7 mm SL, Sea of Okhotsk, Shantar Islands, Russia.

Taxonomic notes on new specimens. Counts and measurements of the two specimens newly collected from sublittoral areas of the southern Sea of Okhotsk are shown in Table 1. The morphological characters of the new specimens agree with those of the original description except for the following differences: body lateral line invisible except for a few anterior neuromasts (vs. lateral line mediolateral in the original description); preopercular pores 3 in the small specimen (vs. 4); body height at pelvic-fin origin 7.9–8.2% SL (vs. 8.6–11.1% SL); gill slit length 3.4% SL in the large specimen (vs. 3.6–5.1% SL); snout length 19.5% HL in the large specimen (vs. 21.0–28.8% HL); and interorbital width 11.3–12.2% HL (vs. 14.9–25.6% HL). We consider these differences to represent intraspecific variation in the species.

Although some anatomical characters were not confirmed by examination in the new specimens (viz., first epibranchial fan-shaped, palatopterygoid series reduced, supraoccipital broadly contacting with exoccipital, and posttemporal ventral ramus weak), both individuals were identical to *Magadanichthys skopetsi* in having a continuous upper lip (discontinuous lip in *Bilabria*, with two species), palatine teeth (absent in *Hadropareia*, two species), and five suborbital bones (six in *Davidijordania*, five species), in addition to the pale spots arranged on the ventral half of the body alongside the anal fin.

The new specimens of *Magadanichthys skopetsi* are the first record after the type lot, and the southernmost record for the species. One of them (HUMZ 140714) is the smallest among the known specimens (75.8 mm SL).

In the following, live coloration based on HUMZ 140684 (Fig. 1) is given first, followed in parentheses by that in alcohol based on both new specimens when changed and/or different from the preceding condition. Dorsal side of head, snout, upper jaw, and cheek dark brown and scattered with whitish (pale) spots; ventrolateral side of lower jaw dark brown; white (pale) band running from snout to just below lower end of gill opening. Dorsal 2/3 of trunk dark brown with whitish (pale) spots; ventral 1/3 whitish; and 3 white (pale) ovals of twice eye diameter alternating on belly with 2 small, white (pale) ovals. Caudal region dark brown with white (pale) spots; 13 (11 in HUMZ 140714) large, white (pale) ovals and 8 or 9 (12 in HUMZ 140714) small, white (pale) spots arranged along anal fin base; each myomere boundary whitish (pale). Dorsal fin membrane brown with transparent vermiculations. Anal fin membrane transparent. Pectoral fin transparent, posterior 2/3 yellowish (whole transparent).

Distribution. Sea of Okhotsk: Nagayeva Bay, Magadan, Russia (ca. 59.5°N, 151°E), the Shantar Islands (ca. 55°N, 137°E), and the northern tip of Sakhalin (ca.

Table 1. Comparison of counts and measurements between new specimens and those in original description of *Magadanichthys skopetsi*.

	HUMZ 140684	HUMZ 140714	Shinohara <i>et al.</i> (2004)
	88.7 mm SL	75.8 mm SL	83.4–115.9 mm SL
Counts			
Nasal pores	2	2	2
Interorbital pores	1	1	0–1
Suborbital pores	6	6	6–7
Postorbital pores	4	4	3–5
Occipital pores	3	3	0–3
Mandibular pores	4	4	4
Preopercular pores	3	4	4
Dorsal fin rays	101	100	94–102
Anal fin rays	83	79	80–88
Pectoral fin rays	13	14	13–15
Pelvic fin rays	3	3	3
Caudal fin rays	7	8	7–8
Branchiostegal rays	6	6	6
Suborbital bones	5	5	5
Vertebrae	102	100	97–104
Pseudobranch filaments	3	4	2–4
Measurements (% SL)			
Head length	15.3	16.2	15.3–18.4
Body height at pelvic fin origin	8.2	7.9	8.6–11.1
Predorsal length	16.7	17.4	16.4–18.9
Preanal length	35.2	37.3	35.5–38.7
Prepectoral length	14.3	16	15.2–17.8
Pectoral fin length	12.4	10.6	9.3–11.7
Gill slit length	3.6	3.4	3.6–5.1
Measurements (% HL)			
Upper jaw length	37.5	34.2	37–46.9
Snout length	21.3	19.5	21–28.8
Eye diameter	25.7	21.2	19.2–22.6
Interorbital width	11.3	12.2	14.9–25.6
Gill slit length	23.5	21.1	20.7–29.8
Pelvic fin length	25.7	22.8	13.3–26.5

54°N, 143°E).

Biology. The new female specimen (HUMZ 140684, 88.7 mm SL) has 28 orange-colored eggs with a diameter of 2.7–2.9 mm. Shinohara *et al.* (2004) reported seven female specimens with ca. 3 mm diameter eggs from Magadan (95.3–108.2 mm SL). The fecundity may be related to body size because the latter, larger specimens have 41–73 eggs. Although the type specimens were found under stones near the outer marginal area of the intertidal zone in June (Shinohara *et al.* 2004), the new specimens were collected from the sea bottom (7–9 m depth at least). Fedorov *et al.* (2003) suggested that this species occurs at 0–30 m depth on the basis of fish collections at the Institute of Biological Problems of the North, Magadan, but Shinohara *et al.* (2004) suspected it was distributed in the intertidal zone during the reproductive season. The present female specimen (HUMZ 140684) had large eggs, which

suggests that the species occurs not only in the intertidal zone but also on the sea bottom at less than 7 m depth during the reproductive season.

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